WHAT IS CLAIMED IS:

- 1. A pharmaceutical composition containing a long-chain, straight-chain alkane or alkene compound which has a 2-amino group and a 3-hydroxy group, together with a pharmaceutically acceptable carrier.
- 2. A composition according to claim 1, wherein the compound is a substituted 2-amino-3-hydroxyalkane or a 2-amino-1,3-dihydroxyalkene.
- 3. A composition according to claim 1 or 2, wherein the compound is a substituted C_{16} C_{24} alkane or alkene.
- 4. A composition according to claim 1, 2 or 3, wherein the compound is a substituted C_{18} C_{20} alkane
- 5. A composition according to claim 1, 2 or 3, wherein the compound is a 2-amino-3-hydroxy C_{18} alkane.
- 6. A composition according to claim 1, wherein the compound is selected from:

spisulosine 285 (1), n=12; spisulosine 299 (2), n=13; spisulosine 313 (3), n=14;

sphingosine (4), n=12 and nonadeca-4-sphingenine (5), n=13; and

sphinga-4, 10-diene (6).

- 7. A method of treating tumors in mammals comprising administering to a patient in need of such treatment, an effective antitumor amount of one or more of the compounds of Claims 1-6, in a pharmaceutically acceptable carrier.
- 8. The method of claim 7, wherein the tumor is selected from breast, head and neck, prostate, bladder, pancreas, lung, oesophagus, liver, colon, thyroid, melanoma, kidney, testicular, leukaemia, ovarian, gastro-intestinal cancer and lymphoma.
- 9. The method of claim 7, wherein the mode of action of the active compound involves the vascular endothelium for control of tissue and tumour vascularisation.
- 10. The method of claim 8, wherein the compound is spisulosine 285 and the tumor is a solid tumour.
- 11. The method of claim 8, wherein the compound is spisulosine 285 and the tumor is a slowly proliferating tumour.
- 12. The method of claim 7, wherein mode of action of the active compound involves alteration of Rho protein activity.
- 13. The method of claim 7, wherein the active ingredient is in admixture with another drug for use in combination therapy.

- 14. A method of treating tumors in mammals comprising administering to a patient in need of such treatment, an effective antitumor amount of a long-chain, straight-chain alkane or alkene compound which has a 2-amino group and a 3-hydroxy group.
- 15. A pharmaceutical composition comprising a long-chain, straight-chain alkane or alkene compound which has a 2-amino group and a 3-hydroxy group, for use in the treatment of cancer.
- 16. The pharmaceutical composition of claim 15, wherein the compound is spisulosine.
- 17. A method of treating a mammal affected by a malignant tumour, which comprises administering to the affected individual a therapeutically effective amount of an active compound which is a long-chain, straight-chain alkane or alkene compound which has a 2-amino group and a 3-hydroxy group.
- 18. A bioactive extract of the clam Spisula polynyma.